

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Canceled).

Claim 2 (Currently Amended): The device according to claim [[1]] 19, wherein the metal material is selected from the group consisting of Mo, Ta, W, Ta, Ni, Cr, Au, Ag, Pd, Cu, Al, Sn, Pt, Ti, and Fe.

Claim 3 (Currently Amended): The device according to claim [[1]] 19, wherein the micro-bodies are granular bodies and have a radius of not more than 100 nm.

Claim 4 (Currently Amended): The device according to claim [[1]] 19, wherein the micro-bodies are rod-shaped bodies and have distal ends with a radius of curvature of not more than 50 nm.

Claim 5 (Currently Amended): The device according to claim [[1]] 19, wherein the micro-bodies are rod-shaped and hollow bodies, and a filler layer consisting essentially of a conductive material is disposed in the micro-bodies.

Claim 6 (Currently Amended): The device according to claim [[1]] 19, wherein the micro-bodies are rod-shaped bodies, and 50% to 100% of the micro-bodies are oriented within an angular range of $\pm 20^\circ$ relative to a major surface of the support substrate, where the cathode electrode is disposed.

Claim 7 (Currently Amended): The device according to claim [[1]] 19, wherein the metal plating layer comprises a resistance ballast layer containing an additive material, which increases a resistance of the metal plating layer.

Claim 8 (Currently Amended): The device according to claim 7, wherein the metal plating layer has a resistivity of $10^{-8} \Omega \cdot \text{cm}$ $\Omega \cdot \text{m}$ to $10^{-4} \Omega \cdot \text{cm}$ $\Omega \cdot \text{m}$.

Claim 9 (Currently Amended): The device according to claim [[1]] 19, wherein the micro-bodies are partly buried in the metal plating layer.

Claim 10 (Currently Amended): The device according to claim [[1]] 19, wherein the micro-bodies are entirely buried in the metal plating layer.

Claim 11 (Canceled).

Claim 12 (Currently Amended): The device according to claim [[1]] 19, further comprising:

a surrounding member cooperating with the support substrate to form a vacuum discharge space that surrounds the arrays of cathode electrode, electrodes and the arrays of gate electrode, and the emitter[[;]] electrodes; and

an anode electrode disposed on the surrounding member at a position opposing the arrays of cathode electrode electrodes and the arrays of gate electrode electrodes.

Claim 13 (Canceled).

Claim 14 (Currently Amended): The device according to claim ~~13~~ 20, wherein the surrounding member comprises a transparent opposite substrate opposing the support substrate, the anode electrode comprises a transparent electrode, and the transparent electrode and a fluorescent layer are stacked on the opposite substrate in the vacuum discharge space.

Claim 15 (Currently Amended): The device according to claim ~~13~~ 20, wherein the metal material is selected from the group consisting of Mo, Ta, W, Ta, Ni, Cr, Au, Ag, Pd, Cu, Al, Sn, Pt, Ti, and Fe.

Claim 16 (Currently Amended): The device according to claim ~~13~~ 20, wherein the micro-bodies are granular bodies and have a radius of not more than 100 nm.

Claim 17 (Currently Amended): The device according to claim ~~13~~ 20, wherein the micro-bodies are rod-shaped bodies and have distal ends with a radius of curvature of not more than 50 nm.

Claim 18 (Canceled).

Claim 19 (New): A field emission cold cathode device of a lateral type comprising:
a support substrate;
arrays of cathode electrodes and arrays of gate electrodes alternately disposed on the support substrate to define a plurality of pairs of a cathode electrode and a gate electrode in a matrix format, such that the cathode electrode and the gate electrode of each of the plurality of pairs have a first side surface and a second side surface, respectively, which oppose each other with a gap interposed therebetween;

an emitter disposed on the first side surface to oppose the second surface and configured to emit electrons, the emitter comprising a metal layer formed on the cathode electrode, and a plurality of granular or rod-shaped micro-bodies supported by the metal layer in a dispersed state and consisting essentially of a metal material; and

a gate projection disposed on the second side surface to oppose the first side surface, the gate projection comprising a gate metal layer consisting essentially of the same material as that of the metal layer, and a plurality of gate micro-bodies supported by the gate metal layer in a dispersed state and consisting essentially of the same material as that of the micro-bodies.

Claim 20 (New): A vacuum micro-device comprising:

a support substrate;

arrays of cathode electrodes and arrays of gate electrodes alternately disposed on the support substrate to define a plurality of pairs of a cathode electrode and a gate electrode in a matrix format, such that the cathode electrode and the gate electrode of each of the plurality of pairs have a first side surface and a second side surface, respectively, which oppose each other with a gap interposed therebetween;

an emitter disposed on the first side surface to oppose the second surface and configured to emit electrons, the emitter comprising a metal layer formed on the cathode electrode, and a plurality of granular or rod-shaped micro-bodies supported by the metal layer in a dispersed state and consisting essentially of a metal material; .

a gate projection disposed on the second side surface to oppose the first side surface, the gate projection comprising a gate metal layer consisting essentially of the same material as that of the metal layer, and a plurality of gate micro-bodies supported by the gate metal

layer in a dispersed state and consisting essentially of the same material as that of the micro-bodies.

a surrounding member cooperating with the support substrate to form a vacuum discharge space that surrounds the arrays of cathode electrodes and the arrays of gate electrodes; and

an anode electrode disposed on the surrounding member at a position opposing the arrays of cathode electrodes and the arrays of gate electrodes.

Claim 21 (New): The device according to claim 19, wherein each of the metal layer and the gate metal layer consists of a metal plating layer.

Claim 22 (New): The device according to claim 20, wherein each of the metal layer and the gate metal layer consists of a metal plating layer.